

(19) World Intellectual Property Organization
International Bureau



PCT

(43) International Publication Date
27 April 2006 (27.04.2006)

(10) International Publication Number
WO 2006/044637 A2

(51) International Patent Classification:
A61F 2/06 (2006.01)

(21) International Application Number:

PCT/US2005/036987

(22) International Filing Date: 13 October 2005 (13.10.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

10/965,230	13 October 2004 (13.10.2004)	US
11/076,448	9 March 2005 (09.03.2005)	US
11/190,514	27 July 2005 (27.07.2005)	US
11/249,138	12 October 2005 (12.10.2005)	US

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(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2006/044637 A2

(54) Title: STEPPED BALLOON CATHETER FOR TREATING VASCULAR BIFURCATIONS

(57) Abstract: A stepped balloon catheter prosthesis deployment system is disclosed for placement of a prosthesis across an Os opening from a main body lumen to a branch body lumen. The prosthesis comprises a radially expandable support at one end, a circumferentially extending link at the other end and at least one frond extending axially therebetween. The prosthesis is configured to be deployed from a stepped diameter balloon with the support in the branch body lumen, with the circumferentially extending link in the main lumen and the frond extendable across the Os.